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Crevice Gardens: Life Between the Cracks

Crevice gardening is a form of rock gardening that allows alpine plants to grow in tight spaces between flat pieces of rock turned on end, often at an angle to mimic natural stratified rock formations.

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Crevice garden. Photo: Kevin Kelly, Penn State Master Gardener

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If you have ever noticed plants growing within the cracks of your sidewalk, you have seen the basic concept of a crevice garden. Crevice gardening is becoming increasingly popular because it offers many benefits over traditional rock gardening, including:

- four-season interest from unique rock formations

- a microclimate that is best for growing alpine plants
- less maintenance than other types of rock gardening, although the initial set-up is more labor-intensive
- a more attractive alternative for a slope or retaining wall

Zdenek Zvolanek (often called "ZZ") of the Czech Republic is considered the pioneer of crevice gardening. Czech gardeners have always been passionate about rock gardening and alpine plants, but even they struggled to grow certain alpine plants. ZZ came up with the idea of turning flat pieces of rock on end, often at an angle, to mimic natural stratified rock formations. The surface is warm, and the crevices drain quickly, keeping the plant crown dry. The narrow space between rocks encourages the development of deep roots where they will be cool and moist. Interest in crevice gardening has spread throughout Europe and into North America. Current hot spots for this type of gardening are Colorado, the Pacific Northwest, and California, but you can now find crevice gardens popping up in nearly all locales.

How to Build a Crevice Garden

Location is critical. Crevice gardens are best in full sun and away from large trees whose roots can disrupt the garden. They can be created on a flat area or a slope, but not in an area where water naturally pools. Great drainage is key. The minimum size needed for looks and function is 4 by 6 feet.

Supplies needed:

- Coarse builders' sand (enough to create a 6-inch layer)
- Flat, irregular, locally sourced stone (flagstone is great), various thicknesses
- Some rounded boulders (optional)
- 3/8 inch locally sourced stone (enough for a 4-inch layer)
- Smaller irregular stone, such as poultry grit, as a top dressing

Crevice garden construction. Photo: Kevin Kelly, Penn State Master Gardener

Define the outside edges of the crevice garden. Dig down 6 inches along the edges. You will not need to remove the soil in the middle since you are trying to create a mound or mini mountain. You may want to add soil to create more of a hump, depending on your space. Lay the sand. Spread about 3 inches into the edges and 6 inches over the rest. Start to lay the flagstone on end. Angle it about 10-20 degrees or straight up and down, depending on your preference. Start in the middle and work outward. Remember, you are trying to mimic stratified rock. Scoop the sand out of the way, set the stone, and push the sand around it. Try to use various thicknesses of stone. The crevices should be 1 to 2 inches wide. Leave some pockets for larger plants. Mix in the small boulders (optional). You can use smaller pieces of flagstone as wedges for support. Fill the sand up to 4 inches from the top of the stones. You will likely move the stones around a lot until you like the look. This can take all afternoon just for a small crevice garden.

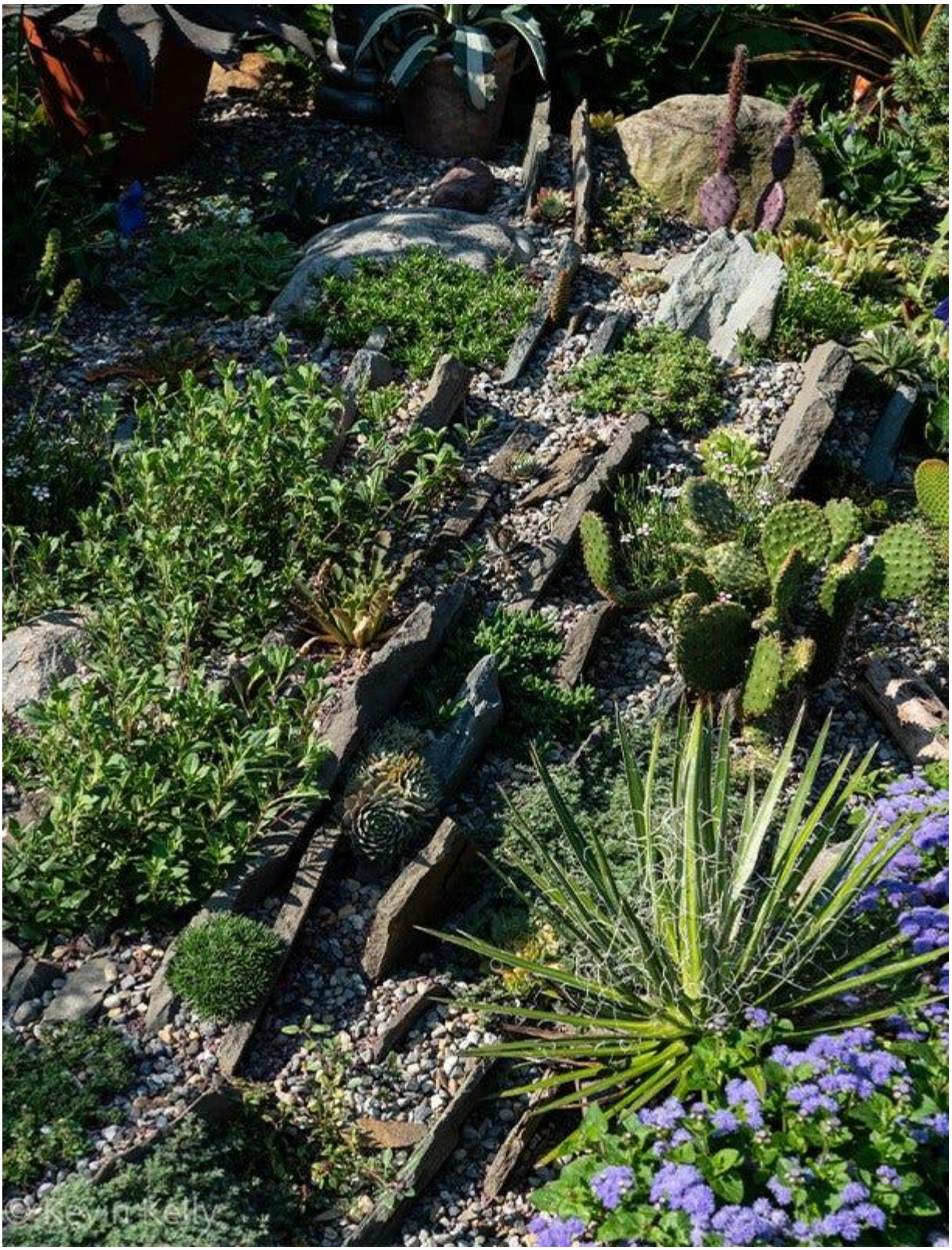
Crevice garden–adding rocks. Photo: Kevin Kelly, Penn State Master Gardener

Start to lay about 2 inches of the 3/8-inch stone over the sand. Now is the time to plant. A list of good beginner plants appears below. Buy the plants in small containers or divide them. Try to bare root the plants by lifting them out of the pot, shaking off as much of the soil as possible, then rinsing away the rest of the soil. Move your stone/sand mix, but do not dig into the soil below. Set the roots into the hole and carefully backfill. Then push more 3/8-inch stone around the plant up to the crown. Once all the plants are in, water well, and water again in two hours. You may need to water 1 to 2 times a week over the next few months until the roots establish.

Maintenance is easy. Keep leaves off the garden. When cutting back the plants, remove the pruned material. You do not want organic material to decay on top of the stones and create soil.

Recommended beginner plants with USDA Hardiness Zones:

- *Sempervivum* spp.; Zones 4-8
- *Thymus pseudolanuginosus* (wooly thyme); Zones 4–8
- *Armeria maritima* (sea thrift); Zones 4–8
- *Aubrieta deltoidea* (rockcress); Zones 5–7
- *Arabis blepharophylla* (coastal rockcress); Zones 5–8
- *Saponaria ocymoides* (rock soapwort); Zone 2–9
- *Delosperma* spp. (ice plant); Zones 6–10
- *Saxifraga* spp. (rockfoil); Zones 5–7
- *Lewisia* spp.; Zones 3–8



Crevice Garden three months after planting. Photo: Kevin Kelly, Penn State Master Gardener

Additional Resources

Kenton Seth and Paul Spriggs are experts in North American crevice gardening. They have a book, *The Crevice Garden,* published in August 2022, with great advice and an extensive plant list. They also have YouTube videos showing how to construct a crevice garden, both in the ground and in a container (same principles but only mixing a handful of soil into the sand for micronutrients).

Authors

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